

# Fraser Cascade Capacity- Building Research Project

## *Enhancing Professional Development for Teachers*

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Schools and school districts spend considerable time and money annually on the professional development of staff, but there is little evidence of the power or validity of different forms of professional development. This mixed qualitative/quantitative research study explores the power of mentoring in professional development for classroom teachers.

*Fraser Cascade (S. D. 78) is a rural school district located in the upper Fraser Valley region of British Columbia, enrolling just under 2000 students. Pat Moret and Joanne Marshall were the POPARD consultants assigned to provide support for students who are diagnosed with an Autism Spectrum Disorder; Donna Barner is the district's liaison ("District Partner") with POPARD.*

*In 2008 Pat began a series of conversations with Donna about the outcomes of workshops through which professional development for teachers is often provided. Pat knew that POPARD did a lot of training throughout the province but did not enroll as many classroom teachers as desired. Yet, there were surveys that told her that teachers are interested in learning more about how to teach students diagnosed with an ASD. She also knew that for "one-shot" workshops, implementation of workshop content is not always successful.*

*Donna shared this concern, and they asked: is there another way of reaching teachers? Joanne Marshall had similar concerns, and she joined the discussions between Pat and Donna in the 2009-10 school year. POPARD had just rolled out a new model of service delivery that combined structured follow-up services (implementations) to student consultations; this model showed promise in enhancing the power of consultation, and Pat, Donna, and Joanne wondered if it could be applied to teacher professional development.*

*They considered collaborative conversation as a potential venue for professional development, and then moved to mentoring, because they felt that this would connect more with the consultation model and with empowerment of teachers to enhance their security in making changes to their practice: "To create empowerment we had to meld an increase in knowledge to confidence to initiate change in practice."*

*The three wrote a proposal and received very positive support from the school district's administrative staff which understood the importance of enhancing professional development. The Fraser Cascade teachers' local association also supported their initiative. POPARD and the school district provided support time and a budget for supplies for the project.*

*Their proposal went through several revisions and was implemented in the 2010-11 school year. They spent the next year doing follow-up and analyzing their results and expect to complete their report by the end of this school year.*

General educators play a primary role in the education of students with disabilities and often report feeling unprepared to undertake this role (Brownell, Adams, Sindelar, Waldron & Vanhover, 2006). Classroom teachers in British Columbia have expressed support for the philosophy of inclusion but have a need for more training to meet the needs of the increasingly broad range of students in their classrooms (Maple Ridge SD, 1997; BCTF, 2002; Langley SD, 2008).

Birman, Desimone, Porter and Garet (2000) identified three structural features that set the context for professional development of teachers. These are:

- the form in which the professional development occurs,
- the duration of the programme, and
- the type of participant.

Three additional "core" features were also identified, including: focus of the content, opportunities for active engagement, and maintaining coherence in professional development experiences. In their study they found that the degree to which professional

development centered on content knowledge was directly related to teachers' reported increase in knowledge and skills. Their active learning experiences included opportunities to observe and be observed teaching, to plan classroom implementation, to develop lesson plans, and to review student works, or lead a discussion or write a report. They described coherence as the extent to which professional development experiences are part of an integrated program of teacher learning that is consistent with teacher goals, builds on earlier activities, is followed by additional activities, and involves teachers in discussing their experiences with other teachers or administrators in the school.

In an interview, Russell Gersten, author of several studies on teacher education, stated that:

*Teachers should focus on learning one technique or approach at a time in an in-depth fashion, and they need to learn it in an environment where they can practice repeatedly with concrete examples and discuss implementation issues with other teachers (Brownell, M. T. & Walther-Thomas, C., 1998, p. 252 ).*

Brownell and Thomas indicated that only a small percentage of teachers participate in activities that met criteria outlined by Birman, Desimone, Porter and Garet (2000) for high quality professional development.

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Goldenberg and Gallimore (1991) and Gersten and Dimino (2001) noted the lack of value of one-shot workshops to effect change in teaching practices and emphasized that changes to teaching practices required more than quick-fix workshops. Gersten and Dimino distilled

from the literature on professional development for teachers a **set of principles that have been found to sustain the use of new teaching practices**. These include the need for teachers:

- to receive some form of feedback in their efforts to implement a new practice;
- to see the new practice as practical, concrete and attainable within their own classroom and
- to be part of a collegial network where participants provide support for one another.

Pat, Donna and Joanne considered the research of Gersten, Woodward and Morvant (1992), Griffin, Winn, Otis-Willborn and Kilgore(2003), Dempsey and Carty (2009), and Bogie (2011)

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who described the effectiveness of mentoring in creating changes in teacher practice. Bogie suggested that mentoring provides new teachers with opportunities for collegial conversations and support from a more experienced teacher, whereas veteran teachers have the opportunity to reflect on their practices, increase their professional responsibilities, broaden their views of the profession and renew their appreciation for the field of education.

**In this project . . .**

. . . Pat, Joanne, and Donna worked with a group of six elementary teachers in S. D. 78 to explore their responses to being mentored in professional development activities that were intended to enhance their classroom management with regard to students with

special needs. Their goal was to evaluate the attributes of mentoring to identify those characteristics that would likely contribute to successful professional development.

### **Participants and Setting**

Six participants volunteered from Fraser Cascade School District. The participants were all teachers in classrooms ranging from kindergarten to grade seven. Specifically, two of the participants taught kindergarten students; two of the participants taught grade one students; one taught grade three students, and one taught grade seven students. The participants were all experienced teachers, and all but one had some training in Special Education intervention strategies. Only two of the teachers currently had a student with autism in their class, but all of the classes included students with a range of learning challenges.

### **How was it implemented?**

Fraser Cascade School District provided a resource book to be used in conjunction with each topic area. In September a meeting was held with participants in order to explain the project and answer any questions. One of the researchers conducted observations of each of the classrooms prior to the start of the project.

Participants attended five three-hour after-school sessions (October to May). The School District provided dinner for everyone. Sessions focused on learning about one aspect of autism and a related intervention strategy. The topics and intervention strategies were identified with regard to their class-wide applicability for all students regardless of an autism diagnosis or not (the intervention strategies selected are commonly used with students with autism). Another criterion for selection was that the topics were discrete and able to be presented in a three-hour workshop. Time was also provided

for discussion/mentoring related to the topic amongst the teachers and with the mentors during each session.

Each three-hour group session included a particular topic:

Topic	Resource
Self-regulation	<i>The Incredible 5 Point Scale</i>
Visual Supports	<i>Visual Strategies For Improving Communication</i>
Understanding Problem Behaviour	<i>No More Meltdowns: Positive Strategies</i>
Social Understanding	<i>Social Behaviour Mapping</i>
Sensory Differences	<i>Learning to Move, Moving Up!</i>

Participants undertook to implement the strategies within their classrooms between sessions. The researchers provided a two-hour mentorship session for each strategy in each participant's classroom.

### Roles of the Researchers

Joanne and Pat prepared PowerPoint presentations and delivered the training sessions, as well as providing mentoring to the teachers on an ongoing basis. They each provided a follow-up visit to each of three classroom teachers, subsequent to each training session, to provide support and mentoring related to each topic. Additional mentoring was provided via telephone and email, similar to that of teacher leaders in the study conducted by Birman, Desimone, Porter and Garet (2000). In some instances, the researchers observed the teacher implement a strategy, and in other instances the researcher co-taught with the teacher or modeled a strategy for the teacher and class. The researchers also assisted in preparing materials or locating resources.

### Data Collection

Data were collected through:

- **A written ecological survey.** This was completed by teachers at the beginning of the research project.
- **Taped interviews with participants.** At the conclusion of the project one of the researchers interviewed each teacher individually in a semi-structured hour-long interview.
- **Logs written by the participants.** Participants were asked to keep logs related to the project (including celebrations and concerns) during the year and to provide these to researchers at the end of the project.
- **Logs written by researchers.** The researchers also kept logs related to the project and examined these at the end of the project.
- **Post observations by an independent observer.** Dr. Leslie Mackay, a POPARD consultant who was not part of the research team, visited the classrooms.
- **Follow-up interviews with participants.** Six months after the end of the project, each teacher was interviewed by one of the researchers to evaluate the extent to which the project continued to influence the participants.

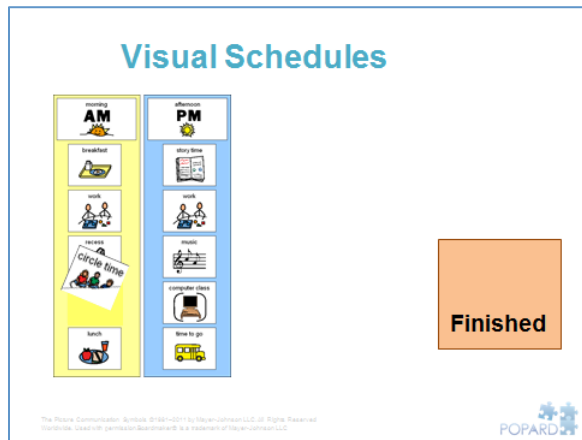
### So What Happened?

All three researchers met at the conclusion of the study to review the exit interviews and logs in order to determine the predominant themes. At least two of the three researchers had to agree to a statement before it could be considered for entry under one of the theme categories. Major themes that emerged included:

- Knowledge
- Competence/confidence
- Planned practice change
- Implemented change in practice

- Use of strategies for all students
- Value of mentoring and challenges

Many of the intervention strategies that participants learned continued to be used for the rest of the year once they had been implemented. However, in the six month follow-up interview (halfway through a new school year), only some of the strategies previously introduced were now reported as being used. Four teachers reported that they were using visual classroom schedules and one teacher reported that she was using an individual schedule for a student.



Additionally, three teachers reported that they were using social behaviour maps, and two teachers reported that they used movement breaks throughout the school day.

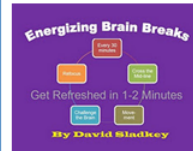
Post-training observations by Dr. MacKay from POPARD illustrated varying degrees of adoption of classroom management techniques by classroom teachers. With regard to adoption by the group of teachers, in her single visit to each classroom, 8 of the 11 types of visual supports (72 %) introduced to teachers were observed to be present or present and used in at least one classroom. With regard to individual classrooms, of the eight supports, more than half (56 %) were present or present and used in each classroom.

## Movement “Brain Breaks”

Quick mental breaks designed to:

- Help students keep focused and manage attention
- Get students moving to carry blood and oxygen to brain

Return to their work refreshed, ready to learn



The Five-Point scale was introduced to assist students in coping; it was observed in 5 of 6 classrooms (83%). Of eight sensory-related interventions presented, six were found in at least one classroom (75 % adoption by the group of teachers), but the overall individual classroom usage rate of the six that were observed was low (31 %). Finally, for overt problem behaviour prevention strategies, with regard to the group adoption rate, all seven were observed to be present across the six classrooms (100 % group adoption rate); that is, in every classroom at least one of the seven was observed. The overall individual adoption rate was 59 %.

*Many of the intervention strategies that participants learned continued to be used for the rest of the year once they had been implemented.*

When asked what would help to continue the strategies that were found useful, one teacher responded “I think I would use [them] if I had a student with autism.” None of the classrooms at the 6 month follow-up enrolled students with autism. Three of the teachers responded that lack of preparation time was a barrier to implementation. Two teachers responded that they would continue to use the strategies if

there were more time for planning and preparation and support from a mentor.

More anecdotal data collected from the teachers indicated that without the presence of the researchers as mentors, the majority of the strategies introduced during the workshop format would not have been implemented. One of the teachers remarked that mentoring made the difference in trying some of the strategies, such as social behaviour mapping. She said "It motivated me to implement it. It was like a little check-up, like oops, yep, I'm supposed to try that because she's coming next week; so, it helped give me a little poke to remember I'm going to do it." Another teacher summed some of the thoughts shared by other research project participants in a very teacher-like fashion: "[It was] totally different from another workshop . . . I knew somebody was coming in, and you want to be good. I want an A!"

All teachers implemented strategies from four of the topic areas. Although some of the teachers expressed difficulty in understanding and implementing the positive behaviour support approach, evidence of positive behaviour supports was found in their classrooms.

Overall, findings support previous research that suggests that mentoring is an effective technique for supporting teachers in developing their knowledge and confidence in using new strategies in their classroom. Students in these classrooms benefitted as a result of their teachers implementing strategies, such as using magazine boxes to organize materials for students who were disorganized. Although some teachers found the functional behaviour topic to be difficult, they acquired new knowledge to understand their students. One teacher noted:

*FBA was probably the hardest [topic]. To pick a kid and try to figure out why they were doing something . . . it was really*

*tricky for me because it always just seems like it's the obvious thing – oh, the kid's just trying to get your attention, but what are they trying to avoid – well, I never even tried to think that way; so what are they trying to get? They're trying to get my attention – ahhh - but to avoid...that was good. Math. Hmm – who knew!*

Teachers also began to expand the use of strategies beyond what was initially discussed in the workshops, such as in providing a variety of movement activities in the classroom. All teachers spent time problem-solving ways to adapt ideas to their grade levels and for particular children. One of the teachers who found data collection difficult devised an on-task tracking system that allowed her to efficiently keep data on students' progress. Another teacher remarked:

*When we did our visuals and our problem-solving strategy 'Stop Ignore Walk Away,' they have transferred to outside the classroom. The principal has a copy of it [now] in her office, so if my kids are referred for a behaviour problem she walks them through the steps.*

For some teachers an initial reaction to having someone in the classroom was nervousness - which soon dissipated after they'd spent time with the mentors and had a better understanding of the mentoring process. One teacher reported that she:

*. . . was nervous when the mentor was coming, but it was always great when she was here, and I said positive things to her and she said positive things to me, and I always felt good when I was done with it.*

A teacher reported that her students loved having someone new come in and tell them something, as it made it more interesting for them. She understood this as an advantage for the students and for herself. For some teachers,

seeing a strategy demonstrated by the mentor made it more doable. A teacher remarked, “I liked the fact that she would come in and actually do the lesson with us or do it for me or help to make the visual I needed. That was really awesome.”

## What did not work so well?

The overall group adoption rates observed by Dr. MacKay for content presented to the six teachers provides evidence of the effectiveness of this training intervention. Most of the content presented in the workshops was utilized in some way by at least one teacher; in one instance the group rate was 100 %. Yet, individual teacher adoptions were lower – for one topic as low as 31 %. It might be argued that lower individual adoption rates are to be expected – even acceptable. Nevertheless, the differences between group and individual adoption rates compel us to ask: “Why are individual rates lower?”

Several limitations are apparent. The teacher-participants in this study were primarily self-selected and do not necessarily represent the majority of teachers in the Fraser Cascade School District or any other district. It was not possible to have a control group of teachers who attended a series of workshops without follow-up mentoring opportunities. If that had been possible, then a clearer inquiry into the value of mentoring could have been made. The qualitative, anecdotal results suggest that without mentoring, adoption rates would have been lower, but was that truly the case?

Fraser-Cascade School District and POPARD purchased materials for the teachers and paid for consultant time. In addition to the cost of these resources, an additional financial and organizational consideration was the amount of personal time the researchers spent in preparing lectures. The teachers, in addition to attending the workshops after their work day,

also spent time preparing lessons and materials for their students to implement the strategies.

Timing is another limiting factor of this project. As with most school-based interventions, this

### Materials Provided by SD 78

*The Incredible 5 Point Scale: Assisting Students with Autism Spectrum Disorders in Understanding Social Interactions and Controlling their Emotional Responses.* (Dunn-Buron, K. & Curtis, M., 2005)

*Visual Strategies For Improving Communication Volume 1: Practical Supports for School and Home* (Hodgdon, L., 1995)

*No More Meltdowns: Positive Strategies for Managing and Preventing Out-Of-Control Behavior* (Baker, J., 2008)

*Social Behaviour Mapping: Connecting Behaviour, Emotions and Consequences across the Day* (Winner, M., 2007)

*Learning to Move, Moving Up! Sensory Motor Elementary –School Activity Themes* (Clark Brack, J., 2009)

project was conducted under the constraints of the school calendar. This may have reduced time for teachers to implement some of the intervention strategies from the topics that were introduced toward the end of the school year. Finally, because the topics for the project were chosen by the researchers, these may not

have addressed teachers' interests or concerns. Did the lack of involvement in selection of the curriculum diminish the use of strategies, even after the subsequent mentoring session?

## Next steps

To investigate the validity and generalizability of these results, the researchers encourage a larger sample size and selection of teachers who are not volunteers. From an organizational perspective, it likely would be helpful to further involve administration as support for teachers. In the 6 month follow up interview, teachers in this project reported that they were using fewer of the strategies introduced during the project. When they were interviewed, job action was being taken by provincial teachers. It is possible that may have had some effect on their responses or their classroom practices. Possibly the amount and type of mentoring was not sufficient to sustain the intervention practices. It was not clear to the mentors as to what would be the best mentoring approach to take with individual participants. The approach that seemed to be preferred by each teacher evolved over the course of the project. It may have been helpful at the initial meeting to discuss with each teacher the type of mentoring they preferred and to have asked for feedback from them after each mentoring session.

## Lessons for Practice

What is good professional development? Well, by anyone's measure, it probably involves at least two attributes: the likelihood of actually *changing* teacher practice and *improving* educational outcomes. The latter was not the focus of the researchers; good evidence-based practices are available from a variety of sources. Instead, Pat, Joanne and Donna focused on how best to change practice.

What they found is that introducing observable change to professional practice is neither

straightforward nor cheap. There were considerable differences across individual classrooms with regard to the incorporation of workshop topics into classroom management. While some change can often be initiated solely through brief encounters with a workshop, to maintain change seems to require more support than is provided through our current model of professional development.

Hours of mentoring can be expensive, and yet the results of this study suggest that to produce deep change, this may be required. As well, change may work best when it is related to the issues and needs of those who are the target of change. This requires clear two-way communication and patience on the part of both teachers and those who would introduce change. More research would be helpful surely, perhaps not so much as to obtain startling insights into how to change practice (to build individual "capacity") but more to help us as a system to organize our thoughts in ways that will help us to find the best pathways toward providing the best education that we can for the children who are in our care.

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